Safety Chasm: Antibiotics Using in Vertical Continuity of Care in Basic Medical Service Net in Rural Area of China

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Abstract

Background: The using of antimicrobial agents has expanded dramatically during the last 30 years, especially in rural area of China. Adverse reactions by overusing/misusing antibiotic drugs has caused very important effects not only to patients and physicians, and also to the whole population. Unfortunately, most of researchers mainly concerned about this situation inner one hospitals or just one specific level of medical institutions in health service networks, however, there also has safety risks of antibiotic using while patients who continuously experienced two vertical levels(or more) of medical institutions for seeking the care which they really need , and if the health system they’ve being through lacks of integration at the same time, or there’s no a well-designed health care information transferring or sharing system among the different levels of medical institutions(such as in remote rural), the secondary medical institution was very likely could not get enough(or even any) medical treatment information from the first institution, then the safety risk of antibiotic drugs using would be much higher. Therefore, this study was mainly about to reveal the safety status and its effect factors of successive antibiotics using which involving two vertical levels of medical institutions in remote rural area of Southwestern China.

Methods: We analyzed 260(130 pairs) in-patient medical records which from 130 patients whom with Respiratory Tract Infection and successively experienced both primary healthcare facilities (township level) and general hospitals (county level) in Qianjiang county (Chongqing city, China) during one same disease process; and conducted 65 items questionnaires to 182 in-patients in the largest hospital in Qianjiang County. The Correspondence analysis in this article were performed by using SPSS17.0.

Results:

1. The results showed that there were 39.8%-43.1% patients who continuous experienced two vertical levels of medical institution in sample area have been treated unsafely by misusing/overusing of antibiotics for the reasons of fragmentized health service system, especially, for the reason of the informational isolation between vertical levels of medical institutions in rural area. 2. By using the method of Correspondence Analysis, we found that to those patient who continuous experienced two vertical levels medical institutions , the physician’s professional qualification(P=0.040<0.05)and the initial disease severity (P=0.011<0.05) related with a series of unsafe behavior of antibiotics using.
Conclusions: The work of this study indicates that although the safety of antibiotic using in single level hospital needs to be seriously concerned in China, because lack of integrated health system in rural medical network, fragment health information transferring and sharing status between multiple levels of physicians, the safety of antibiotics using involves at least two levels of medical institutions in the process of vertical continuity care which has been neglected in the most of time, are also in a very severe situation at present days in remote rural area of China, should be given much more concerns by researchers and policy makers.

Keywords

safety; continuity of care; antibiotics

PowerPoint presentation